

|   |   |  |   |  |                        |                 |                  |                |
|---|---|--|---|--|------------------------|-----------------|------------------|----------------|
| <b>TRANSMITTAL LETTER TO THE UNITED STATES<br/>DESIGNATED/ELECTED OFFICE (DO/EO/US)<br/>CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>   |   | ATTORNEY'S DOCKET NUMBER<br>12406-164US1 P2003,0690 US N<br>U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5)<br><b>10/573095</b> |   |  |                        |                 |                  |                |
| INTERNATIONAL APPLICATION NO.<br>PCT/DE2004/001877  | INTERNATIONAL FILING DATE<br>24 August 2004 | PRIORITY DATE CLAIMED<br>30 September 2003   |   |  |                        |                 |                  |                |
| TITLE OF INVENTION<br>RADIATION DETECTOR  |   |  |   |  |                        |                 |                  |                |
| APPLICANT(S) FOR DO/EO/US<br>Heinz Haas, Frank Möllmer and Michael Schwind  |   |  |   |  |                        |                 |                  |                |
| <p>Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:</p> <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input checked="" type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))                         <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input checked="" type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).                         <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))                         <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input checked="" type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol> <p><b>Items 11 to 20 below concern document(s) or information included:</b></p> <ol style="list-style-type: none"> <li>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. 3.28 and 3.31 is included.</li> <li>13. <input checked="" type="checkbox"/> A preliminary amendment.</li> <li>14. <input type="checkbox"/> An Application Data Sheet under 37 C.F.R. 1.76.</li> <li>15. <input checked="" type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 C.F.R. 1.821 - 1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</li> </ol> |   |  |   |  |                        |                 |                  |                |
| <table style="width: 100%;"> <tr> <td colspan="2"><b>CERTIFICATE OF MAILING BY EXPRESS MAIL</b></td> </tr> <tr> <td>Express Mail Label No.</td> <td>EV 664070796 US</td> </tr> <tr> <td>Date of Deposit:</td> <td>March 23, 2006</td> </tr> </table>  |   |  | <b>CERTIFICATE OF MAILING BY EXPRESS MAIL</b> |  | Express Mail Label No. | EV 664070796 US | Date of Deposit: | March 23, 2006 |
| <b>CERTIFICATE OF MAILING BY EXPRESS MAIL</b>   |   |  |   |  |                        |                 |                  |                |
| Express Mail Label No.  | EV 664070796 US                             |  |   |  |                        |                 |                  |                |
| Date of Deposit:  | March 23, 2006                              |  |   |  |                        |                 |                  |                |

SUBSTITUTE PTO-1390

|  |              |   |         |  |        |
|--|--------------|---|---------|--|--------|
| U.S. APPLICATION NO. (if known, see 37 C.F.R. 1.5)<br><b>10/573095</b>   |              | INTERNATIONAL APPLICATION NO.<br>PCT/DE2004/001877                            |         | ATTORNEY'S DOCKET NUMBER<br>12406-164US1 |        |
| 20. Other items or information:<br>Substitute Specification (clean copy)<br>Substitute Specification (version with marking to show changes made)<br>Statement of Substitute Specification<br>International Search Report<br>Certificate of English Translation   |              |   |         |  |        |
| The following fees have been submitted   |              |   |         | <b>CALCULATIONS PTO USE ONLY</b>         |        |
| 21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.192(a)) .....   |              |   |         | \$300.00                                 |        |
| 22. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(e))<br>If the written opinion prepared by ISA/US or the international preliminary examination report prepared by the IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) .....\$0<br>All other situations .....\$200  |              |   |         | \$200.00                                 |        |
| 23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.92(b))<br>If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) .....\$0<br>Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority.....\$100<br>International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB .....\$400<br>All other situations .....\$500 |              |   |         | \$400.00                                 |        |
| <b>Total of 21, 22 and 23 =</b>  |              |   |         | \$900.00                                 |        |
| <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing filed in an electronic medium) (37 CFR 1.492(j)).<br>The fee is \$250 for each additional 50 sheets of paper or fraction thereof.  |              |   |         |  |        |
| Total Sheets   | Extra Sheets | Number of each additional 50 or fraction thereof (round up to a whole number) | RATE    |  |        |
| -100 =   | /50 =        |   | X \$250 | \$0.00                                   |        |
| Surcharge of \$130 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 C.F.R. 1.492(h)).  |              |   |         | \$0.00                                   |        |
| CLAIMS   | NUMBER FILED | NUMBER EXTRA  | RATE    |  |        |
| Total Claims   | 21 - 20 =    | 1   | x \$50  | \$50.00                                  |        |
| Independent Claims   | 2 - 3 =      | 0   | x \$200 | \$0.00                                   |        |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable)  |              |   | + \$360 | \$0.00                                   |        |
| <b>TOTAL OF ABOVE CALCULATIONS =</b>   |              |   |         | \$950.00                                 |        |
| <input type="checkbox"/> Applicant claims small entity status. See 37 C.F.R. 1.27. Fees above are reduced by 1/2.  |              |   |         | \$0.00                                   |        |
| <b>SUBTOTAL =</b>  |              |   |         | \$950.00                                 |        |
| Processing fee of \$130 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 C.F.R. 1.492(i))   |              |   |         | \$0.00                                   |        |
| <b>TOTAL NATIONAL FEE =</b>  |              |   |         | \$950.00                                 |        |
| Fee for recording the enclosed assignment (37 C.F.R. 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 C.F.R. 3.28, 3.31). \$40.00 per property   |              |   |         | \$0.00                                   |        |
| <b>TOTAL FEES ENCLOSED =</b>   |              |   |         | \$950.00                                 |        |
|  |              |   |         | <b>Amount to be refunded:</b>            | \$0.00 |
|  |              |   |         | <b>Amount to be charged:</b>             | \$0.00 |

IAP20 Rec'd PCT/PTO 23 MAR 2008

- a. ☐ A check in the amount of \$950.00 to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account No. 06-1050 in the amount of \$0.00 to cover the above fees. A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1050. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 C.F.R. 1.495 has not been met, a petition to revive (37 C.F.R. 1.137(a) or (b) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

PTO Customer No: 26161



SIGNATURE

Marc M. Wefers, Ph.D., J.D.

NAME

56,842

REGISTRATION NUMBER

10/573095

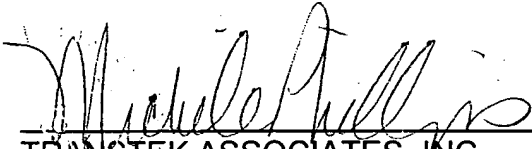
AP20 Rec'd APR 10 08 MAR 2006

# Transtek Associates, Inc.



March 10, 2006

This is a true and accurate translation, to the best of our knowledge and ability, of the German Document, (Transtek Document No. GE0306), submitted to Transtek Associates, Inc. for rendering into English.

  
TRANSTEK ASSOCIATES, INC.  
Michele Phillips, President

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1AP20 Rec'd PCT/PTO 23 MAR 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Heinz Haas et al.  
Serial No. : To Be Assigned  
Filed : Herewith  
Title : RADIATION DETECTOR

Art Unit : Unknown  
Examiner : Unknown

**Mail Stop PCT**

Commissioner for Patents  
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Alexandria, VA 22313-1450

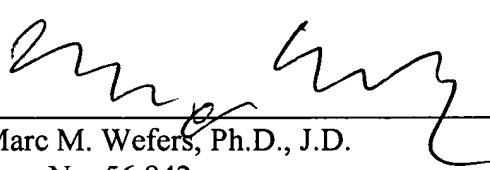
**STATEMENT OF SUBSTITUTE SPECIFICATION UNDER 37 CFR § 1.125**

Pursuant to 37 CFR § 1.125, Applicants submit a substitute specification encompassing changes being made to the translation of English specification of original International Application PCT/DE2004/001877 filed on August 24, 2004. No new matter is introduced by the attached substitution specification, and Applicants request its entry.

Also attached is a marked-up version showing the changes that have been made.

Respectfully submitted,

Date: 3/23/06

  
\_\_\_\_\_  
Marc M. Wefers, Ph.D., J.D.  
Reg. No. 56,842

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